

## **JAPAN - SPECIAL REQUIREMENTS**

(Revised - June, 1997)

### **SECTION 1. INTRODUCTION**

The manner in which Japan accepts aeronautical products from the United States is governed by the Japan-U.S. Bilateral Airworthiness Agreement (BAA) which was effected by an Exchange of Notes on November 29, 1977. In addition, the amendment of Civil Aeronautics Law of Japan will come into effect in October 1997, which includes introducing Type Certification for import aircraft and strengthening of environmental rule such as introducing noise certification for propeller-driven aeroplanes and helicopters, and engine emission control based on ICAO Annex 16. The following in this section summarize the procedures for certification of aeronautical products imported into Japan.

#### **1.1 Procedures for aircraft**

**a.** An Export Certificate of Airworthiness, FAA Form 8130-4, as provided for in [[Title 14 of the Code of Federal Regulations (14 CFR) part 21, (Subpart L)], with pertinent materials specified in Section 3 will be required for aircraft exported from the U.S. to be eligible for Airworthiness Certification by Japan. The pertinent materials is dependent on whether an aircraft is type certificated by Japan or not, and they are prescribed in the separate subsection in Section 3. Type Certification is not prerequisite in Japan, but once the aircraft is type certificated, the requirements and procedures for Japanese Airworthiness Certification for individual imported aircraft is simplified.

**b.** The requirements for obtaining Japanese Type Certificate is specified in Section 2. The procedures for Type Certificate are as follows:

##### **(1) Applicant**

The applicant must hold or have made application for a U.S. Type Certificate.

##### **(2) Administrative procedures**

The application for a Japanese Type Certification and any documents specified in Section 2 must be forwarded to the Airworthiness Division, Engineering Department, Civil Aviation Bureau, Ministry of Transport, No. 3 Godo-Chosha, 2-1-3, Kasumigaseki, Chiyoda-ku, Tokyo, 100, Japan. After receiving the application, the Civil Aviation Bureau of Japan (JCAB) will conduct the following Type Certification procedures.

**(a)** Certification basis will be the airworthiness and environmental requirements of Japan that would be applied for a similar product produced in Japan at the time of original application for the Federal Aviation Administration (FAA) or that of the original Type Certification of the FAA for products currently in production. The JCAB certification basis will be examined on the basis of the FAA certification bases plus special conditions and additional special requirements. JCAB will determine additional special requirements, if any, comparing the airworthiness requirements of Japan with that of the FAA at the time of original application for the FAA and also comparing the environmental requirements of Japan which is equivalent to ICAO Annex 16 with that of the FAA at the time of application for JCAB. When it is deemed necessary to establish special conditions and additional special requirements, JCAB will negotiate with the FAA and the applicant.

“Special Conditions” means the airworthiness requirements added to the importing country’s requirements or change to them for novel or unusual features of the aircraft design to ensure safe condition.

“Additional Special Requirements” means the airworthiness and environmental requirements added to the exporting country’s requirements or specification or change to them to comply with the importing country’s requirements when there are differences in requirements between the importing and exporting countries.

(b) Compliance with the applicable airworthiness requirements will be basically evaluated by documents check on the basis of the original Type Certification.

(c) For JCAB to understand that quality assurance system works adequately, the manufacturing process and the quality assurance system of the applicant will be explained by the applicant. In addition, observation of manufacturing site (final assembling line) by JCAB will be conducted, as necessary.

(d) Ground and flight tests for Type Certification will be conducted on one of the subject type of aircraft based on Production Flight Test Procedures, as necessary.

### (3) Changes to Type Certification

(a) With respect to type design change, JCAB will define the classification of “major change” and “minor change” as follows:

“Major change” is one that has appreciable effect on the weight, balance, structural strength, reliability, operational characteristics, or other characteristics affecting the airworthiness of the aircraft.

All other changes are “minor change”.

(b) Major change in the typed design after Type Certification is subject to approval by JCAB. Application with substantiating data is required for each type design change. Procedures of type design change is similar to that of Type Certification.

(c) Minor change approved by FAA should be notified to JCAB by aircraft manufacturer. JCAB will accept minor change approved by FAA, in principle.

(d) Certification basis applicable to the design change is that of JCAB’s type certification for the subject type of aircraft, in principle. In case of significant design change such as derivative aircraft, certification basis is determined taking into account of practicable application of the latest airworthiness requirements that are directly related to the components or areas affected by the change.

c. The requirements for obtaining Japanese Airworthiness Certificate for individual imported aircraft is specified in Section 3. An Export Certificate of Airworthiness and other related documents specified in Section 3 should be forwarded by the exporter to the Airworthiness Division, Engineering Department, Civil Aviation Bureau, Ministry of Transport, No. 3 Godo-Chosha, 2-1-3, Kasumigaseki, Chiyoda-ku, Tokyo, 100, Japan. The procedures for Airworthiness Certification of individual imported aircraft are as follows:

#### (1) For an aircraft type certificated by Japan

Japanese Airworthiness Certificate is basically issued on the basis of an Export Certificate of Airworthiness and relevant materials specified in Section 3 without further inspections and evaluations.

However, in case that the aircraft is incorporated modification other than JCAB approved type design change or Supplemental Type Certificate (STC), JCAB will request to examine the subject modification and to verify that the aircraft is in safe condition by ground and flight tests. Major change in the type design by the holder of Japanese Type Certificate are subject to approval by JCAB prior to Airworthiness Certification.

**(2) For an aircraft not type certificated by Japan**

Japanese Airworthiness Certificate for individual imported aircraft without Japanese Type Certificate is issued on the basis of an Export Certificate of Airworthiness and relevant documents with additional inspections and evaluations by ground and flight tests of JCAB to verify that the aircraft is in safe condition. A part of the document check can be omitted for the type of aircraft, one of which has been imported to Japan.

**1.2 Procedures for products other than aircraft**

Class I products other than aircraft to be eligible for certification by Japan should be covered by an Export Certificates of Airworthiness, FAA Form 8130-4, as provided for in [[14 CFR part 21, (Subpart L)]]; Class II and III products will be exported in accordance with procedures prescribed in the applicable provisions of [[14 CFR part 21, (Subpart L)]]; with the form of Airworthiness Approval Tags, FAA Form 8130-3. These products certified by the FAA or its designee for airworthiness are automatically recognized as certified in Japan.

**SECTION 2. REQUIREMENTS FOR JAPANESE TYPE CERTIFICATION OF AIRCRAFT**

The following materials should be furnished with application for Japanese Type Certification of imported aircraft. (This should include for approval of Japanese Supplemental Type Certificate (STC).)

- (1)** One copy of the Original Type Certificate of aircraft, engine and propeller.
- (2)** List of Drawings (Master Drawing List).
- (3)** List of parts (Major parts and equipment list).
- (4)** One copy of the current official aircraft, engine, and propeller specifications and special conditions and/or exemptions included in the certification basis.
- (5)** Engineering description of the aircraft including general design philosophy and required illustrations.
- (6)** Aircraft, engines, and propellers certification compliance table (checklist) based on the selected applicable requirements, and indicating that these requirements are complied with.
- (7)** Evidence of strength of primary structure as ascertained by physical tests and/or calculation including load analysis report on airframe, and electrical load analysis report.
- (8)** Evidence of substantiation regarding stress level, low cycle fatigue, endurance, icing, ingestion and blade containment of engine. (For turbine engine only.)
- (9)** Schematic drawing, descriptions, and failure analysis reports on aircraft systems.

(10) One copy of the type flight test report and one copy of production ground and flight test report including procedures and tolerances.

**NOTE:** The required materials (7) through (10) will be identified and notified to the applicant by JCAB after reviewing of certification compliance table. If a summary of evidence or the report is available, it will be acceptable.

(11) One copy of minutes of the Type Certification Board Meetings and the Issue Papers.

(12) One copy of the Maintenance Review Board Report and Minimum Equipment List for aircraft type certificated in transport category.

(13) One copy of parts catalog, operating manual, instructions for continued airworthiness, and service bulletins applying to the aircraft, engines, propellers, and major equipment installed on aircraft.

**NOTE:** Instruction for continued Airworthiness should include an annual inspection method specified in [[14 CFR part 43]], appendix D or equivalent.

(14) One copy of FAA approved aircraft flight manual and draft of aircraft flight manual for JCAB approval.

**NOTE (1):** Aircraft flight manual for JCAB approval shall be in Japanese except in case of aircraft expected to be operated by air carriers carrying JCAB approved airplane operation manual, which is prepared by air carries on board instead of aircraft flight manual. JCAB will approve aircraft flight manual during the process of type Certification.

**NOTE (2):** Aircraft flight manual for JCAB approval should include statement of compliance with noise, fuel venting and exhaust emission requirements of ICAO Annex 16 as well as description of noise level.

(15) One copy of the drawing or design document which requires placards in Japanese.

**NOTE:** A sign on a placard must be written in Japanese. However, in case of an aircraft operated by air carrier, English is acceptable except in emergency evacuation and safety equipment and their equivalents. JCAB will examine the placards in Japanese in the process of Type Certification.

(16) One copy of the report for compliance with noise standard, which should contain the following items:

(a) Certified maximum noise levels in accordance with the applicable chapters and appendices of ICAO Annex 16, volume I, third Edition (1993), or in accordance with applicable aircraft noise requirements of [[14 CFR]] the U.S. Federal Aviation Regulations.

**NOTE:** In the latter case, maximum noise levels measured and/or calculated in accordance with the applicable chapters and appendices of ICAO Annex 16, volume I, Third Edition (1993), should be attached.

(b) Description of noise measuring and analyzing procedures including correction methods.

(c) Statement of any additional modification incorporated for the purpose of compliance with the applicable noise certification standards.

(17) In case of turbine engine powered aircraft, one copy of the report for compliance with fuel venting requirements of ICAO Annex 16, volume II, Second Edition (1993), or in accordance with applicable aircraft emission requirements of [[14 CFR]] the U.S. Federal Aviation Regulations.

(18) In case of turbine engine powered aircraft, one copy of the report for compliance with exhaust emission requirements, which should contain the following items:

(a) Statement indicating compliance with Smoke Number and gaseous pollutant requirements in accordance with the applicable chapters and appendices of ICAO Annex 16, volume II, Second Edition (1993), or in accordance with applicable aircraft emission requirements of [[14 CFR]]the U.S. Federal Aviation Regulations.

**NOTE:** In the latter case, emissions indices for nitrogen oxides (No<sub>x</sub>) and carbon monoxide (CO) measured and/or calculated in accordance with the applicable chapters and appendices of ICAO Annex 16, volume II, Second Edition (1993), should be attached.

(b) Statement of any additional modifications incorporated for the purpose of compliance with the applicable emissions certification requirements.

**NOTE (1):** All the applicable changes and future issues of the above material should be automatically forwarded to the Airworthiness Division, Engineering Department, Civil Aviation Bureau, Ministry of Transport.

**NOTE (2):** JCAB may request additional type design data other than the foregoing materials for the issuance of Japanese Type Certificate.

### **SECTION 3. REQUIREMENTS FOR AIRWORTHINESS CERTIFICATION OF INDIVIDUAL IMPORTED AIRCRAFT**

The following materials should be furnished with aircraft to be exported to Japan.

#### **3.1 For an aircraft of which the model has been type certificated by Japan**

(1) An Export Certificate of Airworthiness which certifies the aircraft conforms to type design approved by JCAB and is in a condition of safe operation.

**NOTE:** An Export Certificate of Airworthiness requires listing of exceptions if the aircraft does not conform to the JCAB approved type design (such as modification according to FAA STC).

(2) One copy of JCAB approved aircraft flight manual and weight and balance report applicable to the particular aircraft.

(3) Certified aircraft, engines, and propellers logbooks, or other equivalent historical records showing total operation time and time since last overhaul.

(4) Record of all modifications accomplished prior to exporting, mandatory as well as non-mandatory.

**NOTE (1):** Manufacture's modifications for major type design change are subject to approval by JCAB prior to Airworthiness Certification.

**NOTE (2):** After the issuance of U.S. Export Certificate of Airworthiness, only the modification for ferry flights covered by FAA Form 337 is acceptable.

(5) For used aircraft, record of annual inspection or equivalent and record of ground and flight test report in addition to above (1) through (4).

**NOTE (1):** JCAB may request additional type design data other than the foregoing material for the issuance of Japanese Airworthiness Certificate.

**NOTE (2):** Placards must be provided in Japanese as specified in Type Certification (Section 2. (15)).

### 3.2 For an aircraft of which the model has not type certificated by Japan

a. If the aircraft is the first (see #) of a model to be exported to Japan, the following materials should be furnished with aircraft (this should include aircraft, with U.S. Supplemental Type Certificate and being the first of a model exported to Japan):

# When in doubt as to whether an aircraft is the first of a model, contact JCAB.

(1) An Export Certificate of Airworthiness certifies that the aircraft complies with the applicable requirements of the U.S. TC plus special conditions and additional special requirements of Japan, provide JCAB notifies FAA, and is in a condition of safe operation.

**NOTE:** An Export Certificate of Airworthiness requires listing of exceptions if the aircraft does not comply with the applicable requirements of the U.S. TC plus special conditions and additional special requirements of Japan (such as modification according to FAA STC).

(2) One copy of the Original Type Certificate of aircraft, engine and propeller.

(3) One copy of the current official aircraft, engine, and propeller specifications and special conditions and/or exemptions included in the certification basis.

(4) Engineering description of the aircraft including general design philosophy and required illustrations.

(5) Aircraft, engines, and propellers certification compliance table (checklist) based on the selected applicable requirements, and indicating that these requirements are complied with.

(6) Master equipment list.

(7) Evidence of strength of primary structure as ascertained by physical tests and/or calculation including load analysis report on airframe, and electrical load analysis report.

(8) Evidence of substantiation regarding stress level, low cycle fatigue, endurance, icing, ingestion and blade containment of engine. (For turbine engine only.)

(9) Schematic drawings, descriptions, and failure analysis reports on aircraft systems.

(10) One copy of the type flight test report and one copy of production ground and flight test report including procedures and tolerances.

**NOTE:** The required materials (7) through (10) will be identified and notified by JCAB after reviewing of certification compliance table. If a summary of evidence or the report is available, it will be acceptable.

(11) One copy of minutes of the Type Certification Board Meetings and the Issue Papers.

(12) One copy of parts catalog, operating manual, instructions for continued airworthiness, and service bulletins applying to the aircraft, engines, propellers, and major equipment installed on aircraft.

**NOTE:** Instructions for continued airworthiness should include an annual inspection method specified in [[14 CFR part 43]], appendix D or equivalent.

(13) One copy of FAA approved aircraft flight manual and weight and balance report applicable to the particular aircraft.

(14) Certified aircraft, engines, and propellers, logbooks, or other equivalent historical records showing total time and time since last overhaul.

(15) Record of all modifications accomplished prior to exporting, mandatory as well as non-mandatory.

**NOTE:** After the issuance of U.S. Export Certificate of Airworthiness, only the modification for ferry flights covered by FAA Form 337 is acceptable.

(16) One copy of the report for compliance with noise standard, which should contain the following items:

(a) Certified maximum noise levels in accordance with the applicable chapters and appendices of ICAO Annex 16, volume I, Third Edition (1993), or in accordance with applicable aircraft noise requirements of [[14 CFR]].

**NOTE:** In the latter case, maximum noise levels measured and/or calculated in accordance with the applicable chapters and appendices of ICAO Annex 16, volume I, Third Edition (1993), should be attached.

(b) Description of noise measuring and analyzing procedures including correction methods.

(c) Statement of any additional modification incorporated for the purpose of compliance with the applicable noise certification standards.

(17) In case of turbine engine powered aircraft, one copy of the report for compliance with fuel venting requirements of ICAO Annex 16, volume II, Second Edition (1993), or in accordance with applicable aircraft emission requirements of [[14 CFR]] U.S. Federal Aviation Regulations.

(18) In case of turbine engine powered aircraft, one copy of the report for compliance with exhaust emissions requirements, which should contain the following items:

(a) Statement indicating compliance with Smoke Number and gaseous pollutant requirements in accordance with the applicable chapters and appendices of ICAO Annex 16, volume II, Second Edition (1993), or in accordance with applicable aircraft emission requirements of [[14 CFR]] U.S. Federal Aviation Regulations.

**NOTE:** In the latter case, emissions indices for nitrogen oxides (No<sub>x</sub>) and carbon monoxide (CO) measured and/or calculated in accordance with the applicable chapters and appendices of ICAO Annex 16, volume II, Second Edition (1993), should be attached.

(b) Statement of any additional modifications incorporated for the purpose of compliance with the applicable emissions certification requirements.

(19) If the aircraft is certificated in the restricted category, the following materials shall be furnished with the aircraft in addition to above (1) through (18).

(a) A statement by the FAA, describing the manner in which the aircraft has been modified from the “standard category” configuration to make it suitable for “special purpose” operation.

(b) A statement indicating [[which]] part of [[Title 14 of the Code of Federal Regulations]], the FAA Aircraft Specifications or Type Certificate Data Sheet under which the aircraft would have been eligible for Type Certification in the “standard category” except for those “special purpose” modifications accomplished by the manufacturer and which are approved by the FAA.

**NOTE (1):** The manufacturer or exporter will be advised by the purchaser on the basis of information furnished to the purchaser by JCAB when the aircraft is the first of a type or model to be imported into Japan.

**NOTE (2):** All the applicable changes and future issues of the above material should be automatically forwarded to the Airworthiness Division, Engineering Department, Civil Aviation Bureau, Ministry of Transport.

**NOTE (3):** JCAB may request additional type design data other than the foregoing materials for the issuance of Japanese Airworthiness Certificate.

b. In case aircraft of the same model has been exported to, and certificated in Japan, the following materials should be furnished with aircraft:

(1) An Export Certificate of Airworthiness certifies that the aircraft is complied with the applicable requirements of the U.S. TC plus special conditions and additional special requirements of Japan, provided JCAB notifies the FAA, and is in a condition of safe operation.

**NOTE:** An Export Certificate of Airworthiness requires listing of exceptions if the aircraft does not comply with the applicable requirements of the U.S. TC plus special conditions and additional special requirements of Japan (such as modification according to FAA STC).

(2) One copy of parts catalog and operating, maintenance, overhaul, and repair manuals applying to the aircraft, engines, propellers, and major equipment installed on aircraft.

(3) One copy of FAA approved aircraft flight manual and weight and balance report applicable to the particular aircraft.

(4) Certified aircraft, engines, and propellers logbooks, or other equivalent historical records showing total operating time and time since last overhaul.



(5) Record of all modifications accomplished prior to exporting, mandatory as well as non-mandatory.

**NOTE:** After the issuance of U.S. Export Certificate of Airworthiness, only the modification for ferry flights covered by FAA Form 337 is acceptable.

**NOTE:** JCAB may request additional type design data other than the foregoing materials for the issuance of Japanese Airworthiness Certificate.

#### **SECTION 4. PROCEDURES FOR AIRCRAFT EXPORTED VIA FLYAWAY WITHOUT U.S. REGISTRATION**

If the aircraft is to be exported via flyaway to Japan without U.S. registration, the manufacturer or exporter should display on the aircraft Japanese nationality and registration marks and carry Japanese Certificate of Registration and ferry permit in the aircraft.

a. Upon application of the purchaser, JCAB will issue Certificate of Registration and ferry permit when the Japanese importer or the U.S. exporter furnishes JCAB the following information:

- (1) Make and model of the aircraft.
- (2) Serial number of the aircraft.
- (3) Purchaser's name and address.
- (4) U.S. exporter's name and address.
- (5) Document which certifies transfer of ownership of the aircraft together with data of transfer.
- (6) Document which certifies airworthiness of the aircraft (Export Certificate of Airworthiness, FAA Form 8130-4).

b. After JCAB receives the foregoing application and information, Japanese Certificate of Registration and ferry permit will be delivered to the applicant. The applicant will then forward these certificates to the U.S. exporter for installation in the aircraft. After this, the aircraft may be flown from the U.S. to Japan.

c. After the issuance of U.S. Export Certificate of Airworthiness, only the modification for ferry flights covered by FAA Form 337 is acceptable.

#### **SECTION 5. PROCEDURES FOR PRODUCTS WHICH DOES NOT MEET SPECIAL REQUIREMENTS OF JAPAN**

If a product which does not meet special requirements for Airworthiness Certification of Japan specified in Section 3 is intended to be exported, a JCAB statement of waiving a certain requirement applied and validating the Export Certificate of Airworthiness is required. All exceptions covered by the statement will be listed in the Export Certificate of Airworthiness.